OPTICAL DEVICES FOR MEDICAL DIAGNOSTICS

5

ABSTRACT

The invention discloses apparatus and methods that combine fluorescence spectra, Raman spectra, and diffuse reflectance, with image

10 analysis in a single instrument package along with algorithms and data processing software. The data processing software involves spectral analysis, image analysis, data compression, data fusion, and classification processes. A spectral database with optical tissue characteristics is developed from a pathology laboratory and/or from in vivo measurements to provide the

15 information required to differentiate normal and abnormal tissue.